INTEGRATED ULTRASONIC SYSTEMS FOR NON-INVASIVE THERAPY

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Establish scientific basis for non-invasive treatment of cancer and heart disease (e.g. ventricular arrhythmia) with precise monitoring and control

National Cancer Institute and National Heart, Lung, and Blood Institute

Ultrasonic Beams	+	Tissue Interaction	=	Goals
- low intensity - high intensity		- thermal - mechanical		- Aim / Treat - Monitor / Control

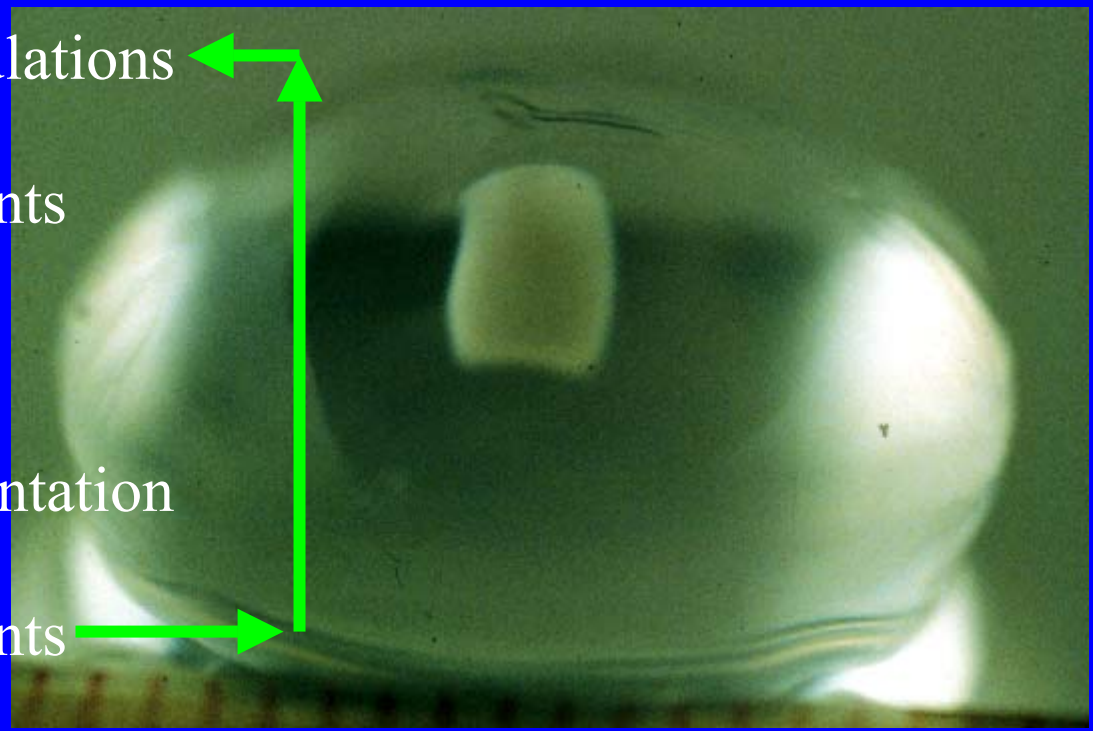
Mathematical models / simulations
- RRI

Validation animal experiments
- WMC & CPS

Integrated system design
- RRI

Advanced systems implementation
- SI

Validation animal experiments
- WMC & CPS



2-sec thermal lesion in bovine lens
(model of solid tissue)